CORRECTION FOR MAY, 1911, REVIEW.

On page 793, the formula in the middle of the first column should read: $0.674 \frac{1-r^2}{\sqrt{n}}$

The chart on page 794 should appear as Fig. 2 on page 795.

The chart on page 795 should appear as Fig. 1 on page 794.

On page 794, second column, sixth line, there should be a period after the first 729.22. -502.5, etc., begins a new sentence.

WEATHER, FORECASTS, AND WARNINGS JULY, 1911.

By EDWARD H. BOWIE, District Forecaster.

During the first half of the month the barometric pressure was above the normal over middle latitudes of the North Atlantic Ocean, and markedly so over the British Isles and Iceland; during the latter half the pressure was generally below normal over these regions, with well-defined depressions over the Azores on the 17th and 20th and again after the 25th, while sharp falls to low pressure were reported from the British Isles on the 16th and during the last five days of the month. Over continental Europe and Siberia the pressure was continually above the normal, except from the 9th to 18th over Russia, and on the 1st and 2d and again on the 17th to 19th over southwestern Europe. The region of the Philippines and the China seas appears to have been the locus of marked storm activity during the month, typhoons passing over the Philippines at the beginning of the month, on the 14th and 15th, and again during the last decade of the month. The last-named disturbance recurved and passed over Japan, causing disastrous floods and the loss of 100 or more lives. Over Alaska and the North Pacific Ocean pressure was near or below normal from the 1st to 10th, abnormally high from the 11th to 19th, and fluctuating near the normal after that date, although a sharp fall to 29.30 inches was recorded at Nome on the 29th.

Unusual heat prevailed over the eastern portions of the United States during the first 11 days of the month and during the latter half on the Pacific coast. It is reported that the month was one of extreme heat over the British Isles and continental Europe. Drought was severe in India, unquestionably due to the prevalence of abnormally high pressure over the interior of Asia during June and the greater part of July, which prevented the development of monsoons of normal force. Widespread rains during the second decade of July afforded much relief from the preceding drought in the middle-western and southwestern parts of the United States.

The first week in July was marked by phenomenally warm weather over the Northern and Middle States, from the Atlantic coast to the Missouri Valley and the Middle Plains States. Temperatures on several days exceeded 100° in the central valleys, eastern Nebraska, Kansas, and Oklahoma, and also at more northern stations in upper Michigan, New England, and the interior of New York and Pennsylvania. For intensity, this warm wave was the severest and most widespread since the summer of 1901. At a number of points in New England, the temperatures recorded exceeded all previous high temperature records, while at a number of points in the Ohio Valley and the Middle West previous high records were equaled and in some instances exceeded. This warm wave was the culmination of a prolonged period of high temperatures in the Middle West. On the 5th a depression passed over the Middle West and reached the Atlantic coast on the 7th. It was attended by local showers and thunderstorms and was followed by an area of high barometric pressure that dispersed the warm wave previously referred to. On the 5th a marked fall in pressure set in at Sitka, Alaska, and on Friday, the 7th, a well-defined disturbance appeared in the Northwest. It moved slowly southeastward to the northern plains States and thence northward, remaining stationary until the 10th in Alberta. This depression caused general showers in the plains States, the Mississippi Valley, and the lake region. It was preceded by a change to considerably warmer weather on the 9th and 10th in northeastern districts, and was followed by abnormally cool weather for the season on these dates in the Rocky Mountain region. Frost occurred in Wyoming, and during the night of the 8th there was light snow at the Yellowstone Park station. The weekly forecast of the 2d, which referred to the warm wave and announced its termination several days in advance, follows:

> The coming week will be one of moderate temperature in the South Atlantic and Gulf States and generally over the region west of the Mississippi River. High temperature will prevail the first part of the week in the Northern and Middle States east of the Mississippi River, followed by a change to lower temperature in these districts about Wednesday. A barometric depression that now covers the Rocky Mountain region will drift slowly eastward, preceded and attended by local showers and thunderstorms, and cross the Mississippi Valley Tuesday or Wednesday and the Middle Atlantic States Thursday or Friday. It will be followed by cooler weather over the Plains States, the Mississippi Valley, and the region east thereof.

Continued high temperatures, causing hundreds of deaths and much suffering, marked the weather for the week ending July 10 in northern and central districts east of the Mississippi River. A change to cooler weather set in over the upper Missouri Valley about the middle of the week and moved eastward, preceded by scattered local showers.

On July 9 the following forecast for the week ending the 16th was issued:

> In the Middle Atlantic and New England States the coming week will begin with warm and generally fair weather, followed by local thundershowers and a change to lower temperature Tuesday or Wednesday and moderate temperature and probably fair weather thereafter until the close of the week, when showers are again probable. In the Southern States the week will be one of seasonal temperatures, with frequent thundershowers. A change to lower temperature, attended by showers, will overspread the middle Mississippi and Ohio Valleys and the region of the Great Lakes Monday or Monday night and will be followed by generally fair weather and moderate temperature in these districts until the latter part of the week, when showers are again probable. Over the Plains States, the Rocky Mountain and Plateau regions, and the Pacific States the next several days will be generally fair, with moderate temperature, probably followed by a period of unsettled weather and local showers after Wednesday, except in the western portion of the Plateau region and in California, where the weather will be generally fair throughout the week.

The weather conditions were true to those forecast. Mean temperatures for the week ending the 17th were generally below normal east of the Mississippi River, except in the lower Lake region and New England. West of the Rockies the temperature was decidedly above normal, especially in Washington and Oregon, where maximum temperatures of nearly 110° were reported, and in northern California they exceeded that figure. Precipitation was generally deficient, except in the lower Lake region, the Ohio Valley, the Middle Atlantic States.